

THE TECH ISSUES CALL

Competitions are soon to open for all departments of THE TECH and an announcement on the first page of this issue tells when and where candidates should report.

There is a great opportunity for a large staff of men to do a great deal of good work and at the same time to get a large amount of valuable experience. The news reporter has the opportunity to get a training similar to that of men on the big daily newspapers. There are also a large number of openings in the business department, which consists of the advertising and circulation departments. In all, there will be openings for at least a hundred men to make themselves prominent in the eyes of their classmates on THE TECH.

It is a well known fact that it is possible for a man to carry on an outside activity and do his school work at the same time. It is possible to gain invaluable experience, become prominent in the class affairs and make a name for oneself. THE TECH is run like a real newspaper and handles a business of over \$20,000 this year. Established in 1881, THE TECH has been the Institute newspaper for 39 years.

REARRANGE COURSES

The executive committee of the Massachusetts Institute of Technology has taken the vacation time to rearrange a number of the courses of instruction. The changes include both condensations and expansions as the experience of past years and the trend of modern education have suggested. The important expansion is the erection of the division of chemical engineering into a full department bearing the same name. This change has been foreshadowed for some time by the success of the division in bringing together the Institute and the manufacturer. The plan has been really to take the Institute to the factory and increase the laboratory facilities of Technology by including great industrial plants with thousands of employees in the ground available for the courses of the students. The initial development of the division was the establishment by Professor C. H. Walker of courses in different manufacturing about the Eastern country. Through the co-operation with Technology of a number of large industrial corporations Professor Walker was able to arrange extra-Technology courses in chemical engineering practice, having five stations, one each in Bangor, Everett, Niagara Falls, Pennsylvania and Connecticut, each of which represented some type of industrial activity.

Faculty Announced

The faculty of the new department includes Professor Walker, chief of the department; Dr. W. K. Lewis, professor of chemical engineering, formerly second to Dr. Walker in the school who now assumes directorship of the School of Engineering Practice assisted by Robert T. Haslam, associate professor of chemical engineering. The latter will have charge of the out-of-town stations and Robert E. Wilson, associate professor of chemical engineering, will be director of the research laboratory. Three assistant professors are now named to take charge of out-of-town stations, Walter G. Whitman, director at Bangor; Paul G. Woodward, director at Everett and Dustin W. Wilson, director at Niagara Falls, or rather Buffalo, for this station includes the important industries of the city as well as those clustered about the falls. The instructors at these stations are: W. P. Ryan at Bangor, Fred P. Baker at Everett and R. F. Tenney at Buffalo.

In the courses in chemical engineering (within Technology) the faculty includes William H. McAdams, assistant professor of chemical engineering; C. S. Robinson, assistant professor of industrial chemistry, and three assistants in chemical engineering, T. H. Hingston, Robert J. Tobin and Charles H. Herty, Jr.

Two Courses Combined

Another change in departments is the consolidation of the geology and geological engineering with mining engineering and metallurgy, with the title, department of mining, metallurgy and geology. Waldemar Lindgren, William Barton professor of economic geology, is the head of the new department, and the personnel includes those who have belonged to the two departments. Still a third change has been the merging of the department of drawing and descriptive geometry with the architectural department, of which it will be a division. Professor William H. Lawrence is head of the department, which is still housed in the Rogers Building on Boylston street. The change will free certain of the rooms in the Cambridge structures probably for the use of students in chemistry which department is sorely in need of more room.

Some rearrangements in personnel

RESEARCH ON COFFEE

Information of Great Trade Value
Expected from Scientific Research
at Massachusetts Institute of
Technology

The Joint Coffee Trade Publicity Committee has signed a contract with the Massachusetts Institute of Technology authorizing the committee to make use of the resources of the Institute for a scientific research regarding coffee. This research will be carried out immediately under the direction of Professor Samuel C. Prescott of the Department of Biology and Public Health, and will continue for at least a year. Professor Prescott will have associated with him several chemists of recognized experience and ability. The work will be done in the laboratories of the Institute.

The project of a scientific investigation into the properties of coffee has been discussed at several conventions of the National Coffee Roasters Association during recent years. Although coffee is now used in the United States more widely than any other beverage, excepting water, and consumption is rapidly increasing, there is a lack of information about it from a chemical and physiological standpoint. Caffein, the flavoring element, is fairly well understood, but there is particular need of a better knowledge of the other elements in the Coffee bean which have a decided effect upon the quality of the brew.

Will Distribute Reports

The investigation now undertaken should develop information of value to coffee dealers throughout the world. As reports are received the Joint Coffee Trade Publicity Committee will distribute this information for the benefit of the trade and will use it in its campaign for the education of the consumer.

Professor Prescott and his assistants first will study what has previously been written on the subject of coffee and with this as a basis will proceed with their original investigation. They will analyze the green coffee bean to determine the quantity and strength of the caffeine it contains; also the quantity and quality of volatile oils, tannin and other ingredients, especially astringent substances which give undesirable flavors in overdrawn coffee. A similar series of tests will be conducted with roasted coffee, using both medium and dark roasts.

Beverage coffees will be studied to determine the effect of the different degrees of granulation—pulverized, medium and coarse. A study will be made also of the effect of water of different temperatures and of different degrees of hardness and methods of purification.

Brewing Methods

The investigators will make coffee by the three standard methods of filtration, percolation and steeping and determine the comparative amounts of caffeine and other elements in the different brews. They will also study the effect produced by the addition to prepared coffee of hot and cold milk, of cream, of sugar, of salt and of soda.

Experiments will be made to determine the best method of storing coffee, under conditions in which temperature, humidity and air supply can be accurately controlled. The Institute has an elaborate apparatus which is being used in a series of tests conducted by the United States Government in dehydrating fruits and vegetables. This apparatus will be at the services of the coffee investigators. This branch of the research may lead to suggestions for improving methods of packing and storing and for improvements in types of containers.

Aroma and flavor, those elusive elements which largely determine the different grades of coffee, will be carefully studied so as to find out as fully as possible their origin, how they are best preserved and the conditions under which deterioration takes place.

WELCOMES NEW STUDENTS

Mrs. R. P. Bigelow wishes to call the attention of the students to the following notice: The Student Hospitality Committee of M. I. T. and other members of the Technology Matrons will be glad to welcome all new students in the Emma Rogers Room today from 10 to 5 o'clock. Information about rooms and plans of the city will be on hand.

have been made in the Research Laboratory of Physical Chemistry, which is a part of the department of chemistry. F. G. Keyes, associate professor of physico-chemical research, has been made director, D. A. MacInnes and Louis J. Gillespie, assistant professors, and James A. Beatty and Charles E. Ruby, research associate.

M. I. T.

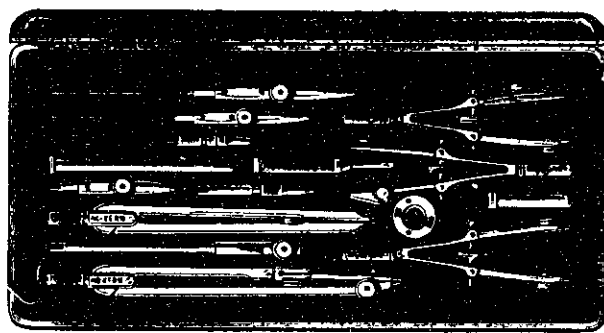
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